

Datasheet for ABIN3044247  
**anti-NDUFA1 antibody (C-Term)**[Go to Product page](#)

## 3 Images

## Overview

Quantity:	100 µg
Target:	NDUFA1
Binding Specificity:	AA 54-70, C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for NADH dehydrogenase[ubiquinone] 1 alpha subcomplex subunit 1(NDUFA1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human NDUFA1(54-70aa ISGVDRYYVSKGLENID), different from the related rat and mouse sequences by one amino acid.
Sequence:	ISGVDRYYVS KGLENID
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for NADH dehydrogenase[ubiquinone] 1 alpha subcomplex subunit 1(NDUFA1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human,Mouse,Rat. Gene Name: NADH dehydrogenase(ubiquinone) 1 alpha subcomplex, 1, 7.5 kDa Protein Name: NADH dehydrogenase[ubiquinone] 1 alpha subcomplex subunit 1

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: NDUFA1

Alternative Name: NDUFA1 ([NDUFA1 Products](#))

Background: NDUFA1(NADH-UBIQUINONE OXIDOREDUCTASE 1 ALPHA SUBCOMPLEX, 1), also called MWFE, B. TAURUS, HOMOLOG OF, encodes a subunit of mitochondrial NADH: ubiquinone oxidoreductase, also known as mitochondrial complex I. The NDUFA1 gene is mapped to chromosome Xq24. The deduced polypeptide sequence of NDUFA1 was found to have an N-terminal hydrophobic domain, likely to be a transmembrane domain, and a C-terminal hydrophilic domain. And the NDUFA1 gene contains 3 exons and spans about 5.0 kb of genomic DNA. Complementation with hamster Ndufa1 cDNA restored the rotenone-sensitive complex I activity of these mutant cells to approximately 100 % of the parent cell activity. The findings established that the MWFE polypeptide is absolutely essential for an active complex I in mammals. The NDUFA1 peptide is one of about 31 components of the "hydrophobic protein"(HP) fraction of complex I which is involved in proton translocation. Thus the NDUFA1 peptide may also participate in that function.

Synonyms: CI MWFE antibody|CI-MWFE antibody|Complex I MWFE antibody|complex I MWFE subunit antibody|Complex I-MWFE antibody|MWFE antibody|MWFE, B. taurus, homolog of antibody|NADH dehydrogenase(ubiquinone) 1 alpha subcomplex 1 7.5 kDa antibody|NADH dehydrogenase(ubiquinone) 1 alpha subcomplex 1 antibody|NADH dehydrogenase[ubiquinone] 1 alpha subcomplex subunit 1 antibody|NADH oxidoreductase subunit MWFE antibody|NADH ubiquinone oxidoreductase(complex 1) antibody|NADH ubiquinone oxidoreductase MWFE subunit antibody|NADH-ubiquinone oxidoreductase 1 alpha subcomplex, 1 antibody|NADH-ubiquinone oxidoreductase MWFE subunit antibody|NDUA1\_HUMAN antibody|NDUFA 1 antibody|NDUFA1 antibody|Type I dehydrogenase antibody|ZNF 183 antibody|ZNF183 antibody

UniProt: [O15239](#)

## Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse  
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.

## Application Details

IHC-F: Concentration: 0.5-1 µg/mL, Tested Species: Rat, Predicted Species: Human, Mouse  
ICC: Concentration: 0.5-1 µg/mL, Tested Species: Human, Predicted Species: Mouse, Rat  
Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested.  
Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P), IHC(F) and ICC.

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Thimerosal (Merthiolate), Sodium azide

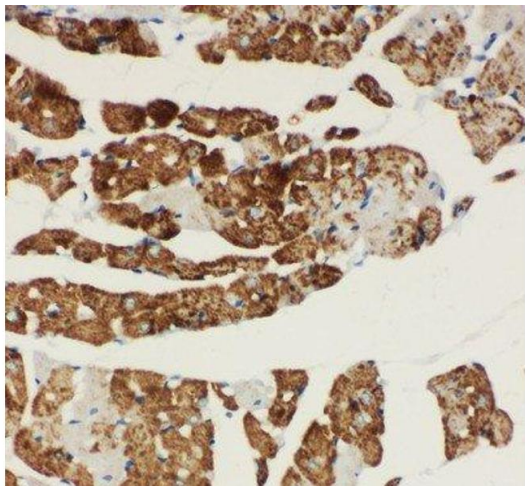
Precaution of Use: This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

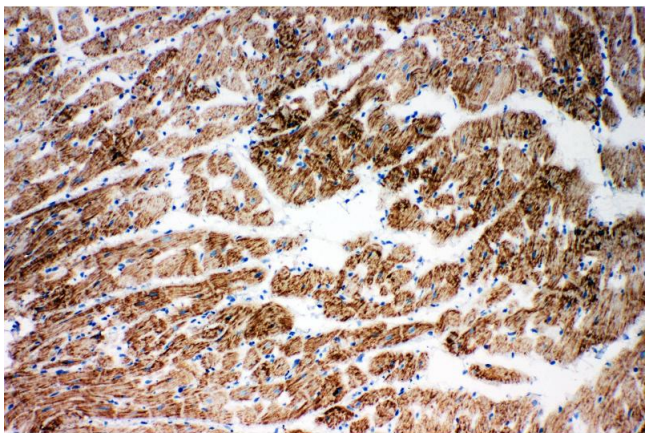
Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Expiry Date: 12 months



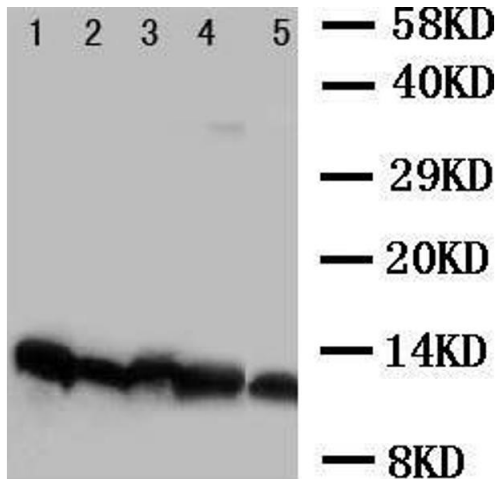
Immunohistochemistry

**Image 1.** Anti-NDUFA1 antibody, IHC(P) IHC(P): Rat Cardiac Muscle Tissue



Immunohistochemistry

**Image 2.** Anti-NDUFA1 antibody, IHC(F) IHC(F): Rat Cardiac Muscle Tissue



Western Blotting

**Image 3.** Anti-NDUFA1 antibody, Western blotting Lane 1: Rat Cardiac Muscle Tissue Lysate Lane 2: Rat Liver Tissue Lysate Lane 3: Rat Kidney Tissue Lysate Lane 4: Rat Brain Tissue Lysate Lane 5: Cell Lysate